AMENDMENTS TO THE SPECIFICATION:

Please delete the paragraph beginning at page 8, line 4, which starts with "The spin valve 110."

Please amend the paragraph beginning at page 8, line 15, to page 9, line 5 as follows:

The spin valve ~~10~~110 shown in Figure ~~1~~3 is of the CIP (current in plane) type, i.e. to the spin valve, by means of a generator ~~19~~119, is applied a current I that flows in planar fashion in the spacer layer ~~13~~113 and in the other layers of the spin valve ~~10~~110. The spacer layer ~~13~~113 then is the layer that contributes most to determine the electrical resistance of the spin valve ~~10~~110 in the absence of a magnetic field. It is also possible to have a CPP configuration (Current Perpendicular to Plane), in which the current I is forced to traverse vertically the stacked layers of the spin valve.

In the absence of an external magnetic field, the spin valve shown in Figure ~~1~~3 is in ferromagnetic configuration, i.e. the free magnetic layer ~~11~~111 and the permanent magnetic layer ~~12~~112 have the same direction of magnetisation. In the figures, the direction of the temporary magnetisation associated with the free magnetic layer 111 is indicated with an arrow and the reference MT, whilst the direction of the permanent magnetisation associated with the permanent magnetic layer 112 is indicated with an arrow and the reference MP. Thus in this case the spin valve 110 has high electrical conductivity, since the path of the electrons, designated by the reference "e" in Figure 4 undergoes substantially no scattering inside the spin valve device 110.

Please amend the paragraph beginning at page 9, line 24, to page 10 line 4 as follows:

The spacer layer ~~113~~123 instead is of the composite mesoscopic type, in which nanoparticles 124 are dispersed in a matrix structure 125.

The spin valve 120 shown in Figure 5 is particularly suitable for a GMR sensor, so the spacer layer ~~113~~123 is obtained with a composite mesoscopic structure, in which the nanoparticles 124 made of metal, but also possibly of ferromagnetic and/or dielectric and/or ceramic and/or semiconductor material, are dispersed in the ~~metallic~~ matrix structure 125 with a thickness ranging from a few angstrom to hundreds of nanometers. Such a structure of the spacer layer 113 allows to control the electronic scattering properties and to control the reference electrical resistance of the device in the absence of magnetic field and of the dynamic work field.